FACT SHEET ON HUMAN HEALTH RISKS FROM DENTAL AMALGAM MERCURY FILLINGS
Prepared by the International Academy of Oral Medicine and Toxicology (IAOMT, www.iaomt.org)

All silver-colored fillings are dental amalgams, and each and every one of these fillings is comprised of 45%-55% mercury. 1 The World Health Organization has stated, “Recent studies suggest that mercury may have no threshold below which some adverse effects do not occur.” 2 Although a number of other countries have banned or limited their use, dental mercury amalgams are currently used on about 45% of direct dental restorations worldwide, 3 including in the USA. 4

Mercury is continuously emitted from amalgam fillings, and it is absorbed and retained in the body, particularly in the brain, kidney, liver, lung, and gastrointestinal tract. 5 The output of mercury can be intensified by the number of fillings and other activities, such as chewing, teeth-grinding, and the consumption of hot liquids. Mercury is also known to be released during the placement, replacement, and removal of dental mercury amalgam fillings.

Scientific studies have documented the potential risks these fillings pose to human health:

1) The General Population: Mercury in amalgam fillings has been scientifically linked to a number of health conditions. Individual response to mercury varies, and some of the factors known to potentially impact those exposed to mercury include their allergies, diet, gender, genetic predispositions to adverse reactions from mercury, the number of amalgam fillings in the mouth, and concurrent or previous exposures to other toxic chemicals such as lead (Pb). Scientific studies have identified dental mercury as a potentially causational or exacerbating factor in the conditions included on the table to the right. ➤

<table>
<thead>
<tr>
<th>Allergies</th>
<th>Alzheimer’s disease</th>
<th>Amyotrophic lateral sclerosis (Lou Gehrig’s disease)</th>
<th>Antibiotic resistance</th>
<th>Autism spectrum disorders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autoimmune disorders/immuno-deficiency</td>
<td>Cardiovascular problems</td>
<td>Chronic fatigue, fatigue, myalgic encephalomyelitis/chronic fatigue syndrome</td>
<td>Complaints of unclear causation</td>
<td>Dermatitis</td>
</tr>
<tr>
<td>Fibromyalgia</td>
<td>Gastrointestinal issues and/or irritable bowel syndrome</td>
<td>Hearing loss</td>
<td>Kidney disease</td>
<td>Multiple sclerosis</td>
</tr>
<tr>
<td>Oral lichenoid reaction and oral lichen planus</td>
<td>Orofacial granulomatosis</td>
<td>Parkinson’s disease</td>
<td>Periodontal disease</td>
<td>Psychological issues such as depression and anxiety</td>
</tr>
<tr>
<td>Reproductive dysfunction</td>
<td>Suicidal ideations</td>
<td>Symptoms of chronic mercury poisoning</td>
<td>Systemic lupus erythematosus</td>
<td>Thyroiditis</td>
</tr>
</tbody>
</table>

2) Pregnant Women and Children: Scientific studies have documented the impact mercury can have on pregnant women and children, and the number of maternal amalgam fillings has been associated with mercury levels in cord blood; in the placenta; in the kidneys and liver of fetuses; in fetal hair; and in the brain and kidneys of infants; as well as the risk of perinatal death.

3) Dentists and Dental Personnel: Researchers have also demonstrated dangers to dental personnel who routinely work with amalgam, and the Norwegian Labour and Welfare Service has officially recognized mercury injury as an occupational disease.

4) Safe Removal of Existing Amalgam Fillings: Whereas “mercury-free” dentists no longer place amalgam fillings and use available alternatives, “mercury-safe” dentists apply special techniques to remove existing amalgam fillings. In fact, the IAOMT has developed rigorous recommendations, known as the Safe Mercury Amalgam Removal Technique (SMART), for removing existing dental mercury amalgam fillings to assist in mitigating the potential negative outcomes of mercury exposure to patients, dental professionals, dental students, office staff, and others. 6

In September 2020, the FDA advised that the following groups avoid getting dental amalgam whenever possible and appropriate: pregnant women and their developing fetuses; women who are planning to become pregnant; nursing women and their newborns and infants; children, especially those younger than six years of age; people with pre-existing neurological disease such as multiple sclerosis, Alzheimer’s disease or Parkinson’s disease; people with impaired kidney function; and people with known heightened sensitivity (allergy) to mercury or other components of dental amalgam. 7

For more detailed information and a full list of sources, download the IAOMT’s “Comprehensive Review of Dental Mercury” by scanning the code to the left or visiting https://iaomt.org/wp-content/uploads/Comprehensive-Review-Dental-Mercury.pdf

2 Ibid.
5 Many scientific studies support this, but an example from a reputable government agency is Health Canada. The Safety of Dental Amalgam. 1996: 4.

This fact sheet was last updated on October 6, 2020.